

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (original). A method for describing an image comprising the steps of:

- (a) defining a spatial structural element including a plurality of picture elements;
- (b) delineating on said image a plurality of test areas corresponding to said spatial structural element; and
- (c) quantifying a plurality of colors of each of said test areas, where said quantifying of said plurality of colors for each of said test areas is independent of the number of each of said quantified colors in each of said respective test areas.

2 (original). The method of claim 1 wherein said quantifying of said plurality of colors for each of said test areas is independent of the number of pixels within each of said test areas that have the same quantified color.

3 (original). The method of claim 1 wherein said quantifying quantizes said plurality of colors accordingly to a plurality of quantized color regions, where each of said quantized color regions includes a plurality of colors of the color space of said image.

4 (original). The method of claim 1 wherein the color space of said image is quantized into a plurality of quantized color regions and said plurality of colors of each of said test areas are quantified in accordance with said quantized color regions.

5 (original). The method of claim 4 wherein said quantifying of said plurality of colors of each of said test areas provides a one-dimensional histogram.

6 (currently amended). The method of claim 1 wherein said method for describing includes a DDL representation syntax for a color structure having the form ~~may be described by~~

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<complexType name="ColorStructureType">  
  <complexContent>
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<extension base="VisualDType">
  <sequence minOccurs="1" maxOccurs="1">
    <element name="Values" minOccurs="1" maxOccurs="1"
      <simpleType>
        <list itemType="unsigned8">
          <minLength Value="3/32"/>
          <maxLength value="256"/>
        </list>
      </simpleType>
    </element>
  </sequence>
  <attribute name="colorQuant" type="mpeg7:unsigned3"
use"required"/>
</extension>
</complexContent>
</complexType>.
```

7 (original). The method of claim 1 where the size of the said spatial structural element is selected in accordance with the size of said image.

8-14 (canceled).

15 (original). A method for describing an image comprising the steps of:

- (a) defining a spatial structural element including a plurality of picture elements, where the size of said spatial structural element is selected in accordance with the size of said image;
- (b) delineating on said image a plurality of test areas corresponding to said spatial structural element; and
- (c) quantifying a plurality of colors of each of said test areas.

16 (original). The method of claim 15 wherein said spatial structural element is a first element size when said image is a first image size, said spatial structural element is a second

element size when said image is a second image size, wherein said first element size is smaller than said second element size and said first image size is smaller than said second image size.

17 (original). The method of claim 16 where said quantifying of said plurality of colors for each of said test areas is independent of the number of each of the quantified colors in each of said respective test areas.

18(original) . The method of claim 15 wherein said quantifying of said plurality of colors for each of said test areas is independent of the number of pixels within each of said test areas that have the same quantized color.

19(original) . The method of claim 15 wherein said quantifying quantizes said plurality of colors accordingly to a plurality of quantized color regions, where each of said quantized color regions includes a plurality of colors of the color space of said image.

20(original) . The method of claim 15 wherein the color space of said image is quantized into a plurality of quantized color regions and said plurality of colors of each of said test areas are quantified in accordance with said quantized color regions.

21(original) . The method of claim 15 wherein said quantifying of said plurality of colors of each of said test areas provides a one-dimensional histogram.

22 (canceled) .

23(original) . The method of claim 15 wherein said spatial structural element is 8x8.

24(original) . The method of claim 23 wherein said 8x8 includes 64 samples.

25(original) . The method of claim 15 wherein said spatial structural element is maintained at a predetermined size and said image is sub-sampled to determine said test areas corresponding to said spatial structural element.

26(original) . The method of claim 25 wherein said sub-sampling is performed implicitly.

27(original). The method of claim 15 wherein

$$p = \max \{0, \text{round}(0.5 * \log_2(\text{width} * \text{height}) - 8)\}$$

where

width is the width of the image;

height is the height of the image;

K is the sub-sampling factor applied to said image,

$$K = 2^p$$

E is the spatial extent of said spatial structural element,

$$E = 8 * K.$$

28 (original). A method for comparing a first image to a second image comprising the steps of:

- (a) defining a first spatial structural element including a plurality of picture elements;
- (b) delineating on said first image a plurality of first test areas corresponding to said first spatial structural element;
- (c) quantizing a first plurality of colors of each of said first test areas;
- (d) re-quantizing said quantifying of step (c) to a different quantization level;
- (e) defining a second spatial structural element including a plurality of picture elements;
- (f) delineating on said second image a plurality of second test areas corresponding to said second spatial structural element;
- (g) quantizing a second plurality of colors of each of said second test areas;
- (h) re-quantizing said quantizing of step (g) to said different quantization level; and
- (i) comparing said re-quantizing of step (d) with said re-quantifying of step (h).

29 (original). The method of claim 28 wherein said quantizing said first plurality of colors results in a first descriptor having a first number of bins and said quantizing said second plurality of colors results in a second descriptor having a second number of bins.

30 (original). The method of claim 29 wherein said first number of bins and said second number of bins are equal.

31 (original). The method of claim 29 wherein said first number of bins and the number of bins of said different quantization level are equal.

32 (original). The method of claim 29 wherein said second number of bins and the number of bins of said different quantization level are equal.

33 (original). The method of claim 28 wherein said re-quantizing includes a proper refinement.

34-50 (canceled).